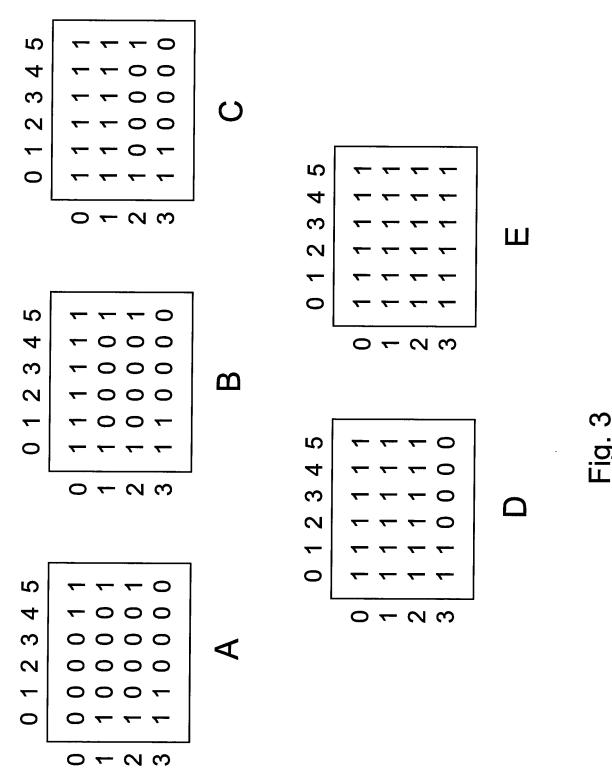


Fig.



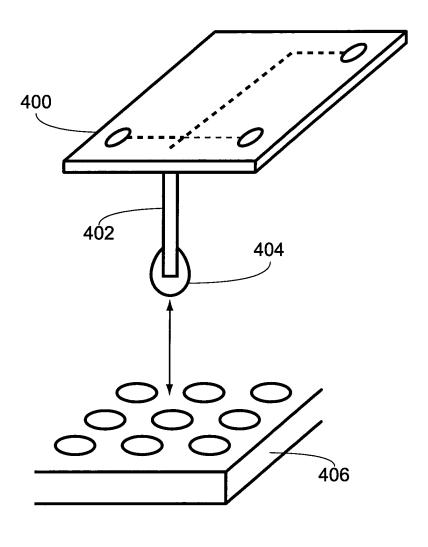


Fig. 4

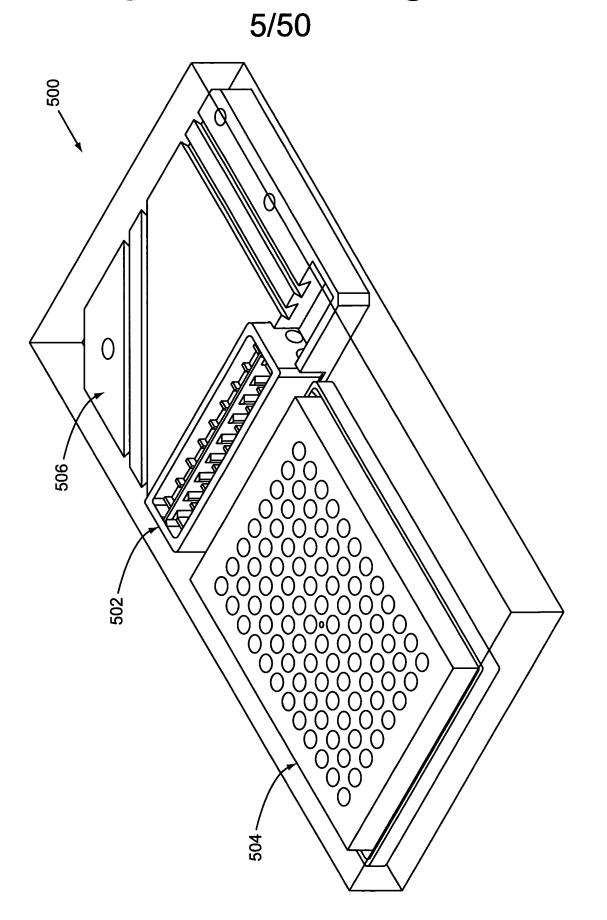
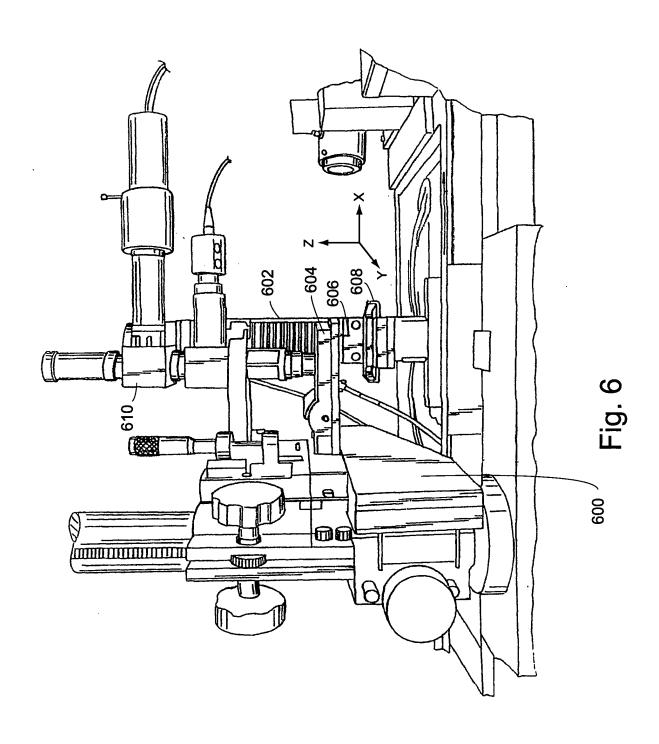


Fig. 5



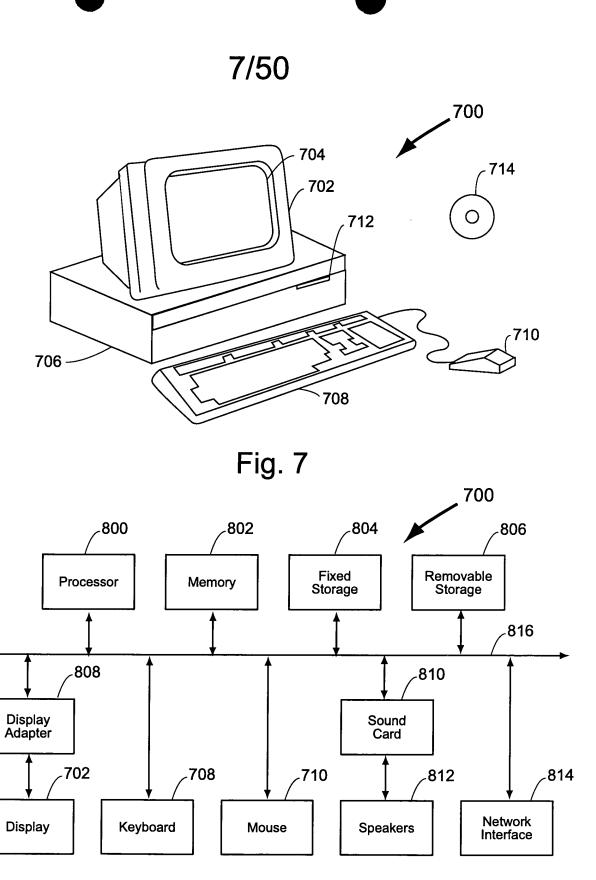


Fig. 8

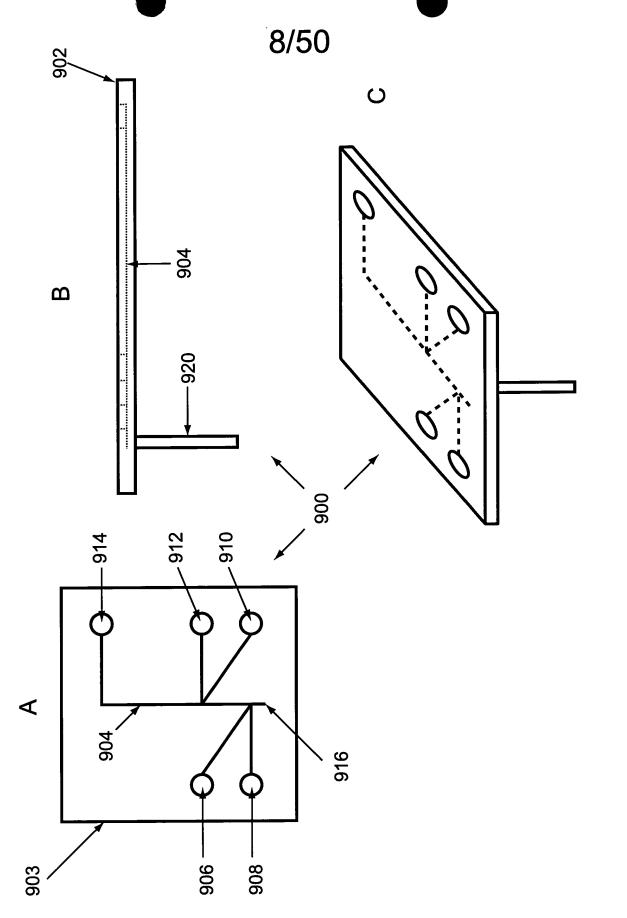


Fig. 9

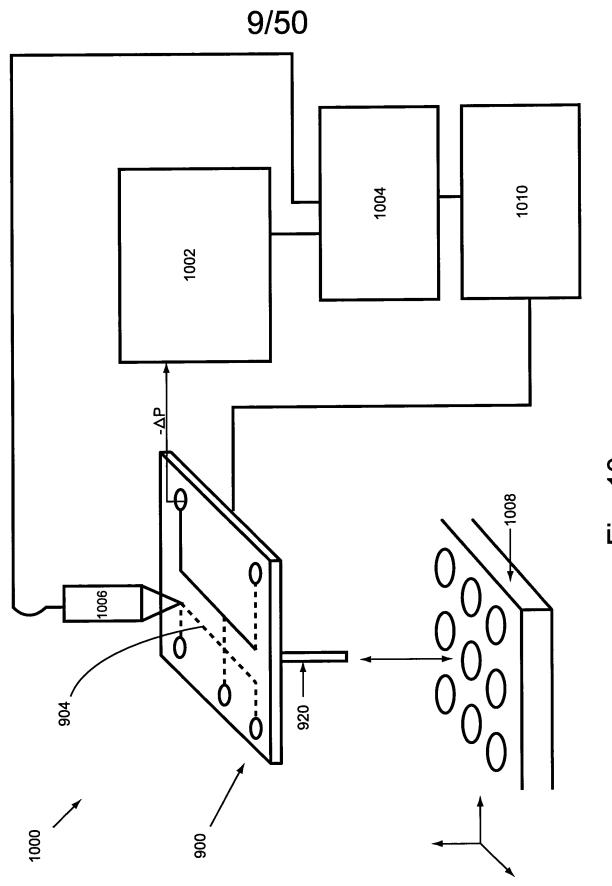


Fig. 10

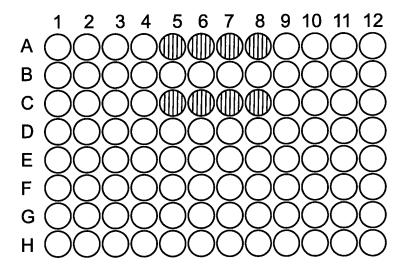


Fig. 11A

- Dwell P	attern —	
Name:	FewNoTrough.DP4_96	
Row A	: 5,6	

Fig. 11B

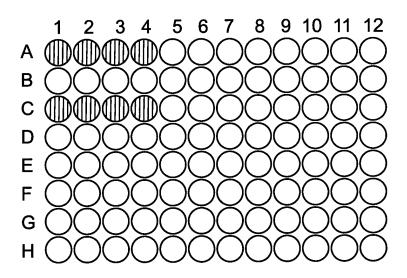


Fig. 11C

– Dwell Patte	m ———
Name: Fe	wTrough.DP4_96
Row A: 1	,2

Fig. 11D

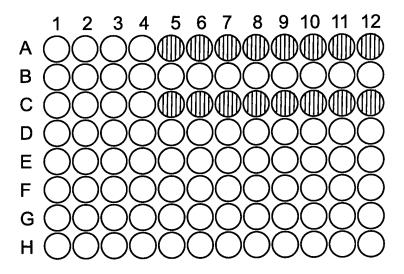


Fig. 11E

- Dwell Pattern	
Name: SeveralNoTrough.DP4_96	
Row A: 5,6,9,10	

Fig. 11F

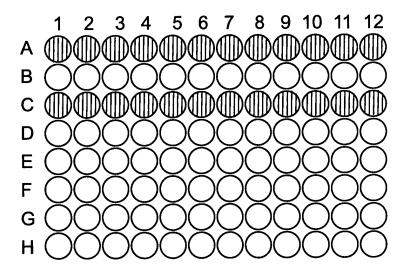


Fig. 11G

- Dwell P	attern —
Name:	SeveralTrough.DP4_96
Row A	: 1,2,5,6,9,10

Fig. 11H

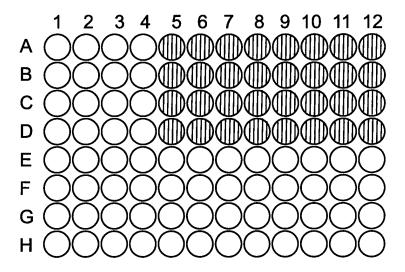


Fig. 111

- Dwell P	attern ————
Name:	HalfNoTrough.DP4_96
	: 5,6,9,10 : 5,6,9,10

Fig. 11J

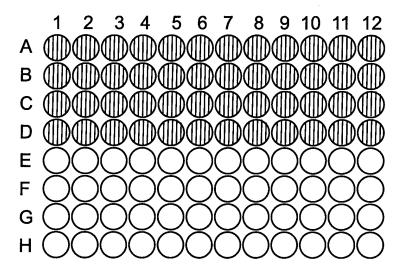


Fig. 11K

- Dwell Pattern	
Name: HalfTrough.DP4_96	
Row A: 1,2,5,6,9,10 Row B: 1,2,5,6,9,10	

Fig. 11L

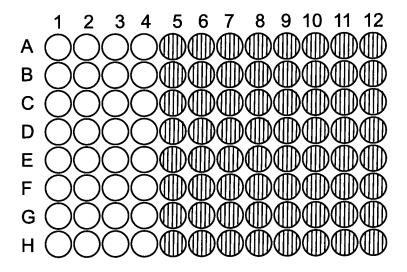


Fig. 11M

– Dwell Pa	attern ————
Name:	FullNoTrough.DP4_96
Row B: Row E:	5,6,9,10 5,6,9,10 5,6,9,10 5,6,9,10

Fig. 11N

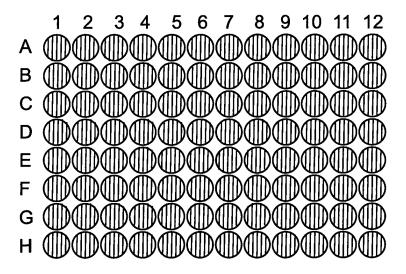
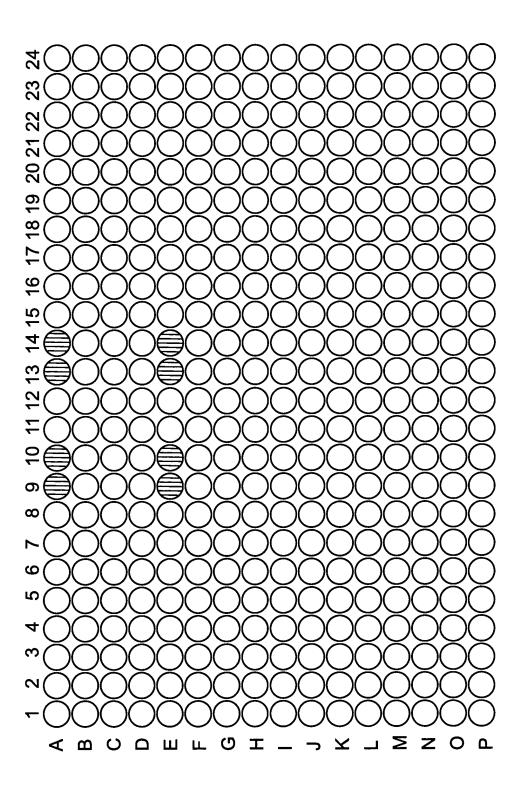


Fig. 110

- Dwell P	attern —
Name:	FullTrough.DP4_96
Row A	: 1,2,5,6,9,10
Row B	: 1,2,5,6,9,10
Row E	: 1,2,5,6,9,10
Row F	: 1,2,5,6,9,10

Fig. 11P



ipper Opti	ons			
General	Directories	Sample Wells	Advanced	
– Dwell Pa	attern ———			-
Name:	FewNoTroug	h.DP4_384		New
Row A: 9,10			Load	
				Save As

Fig. 12B

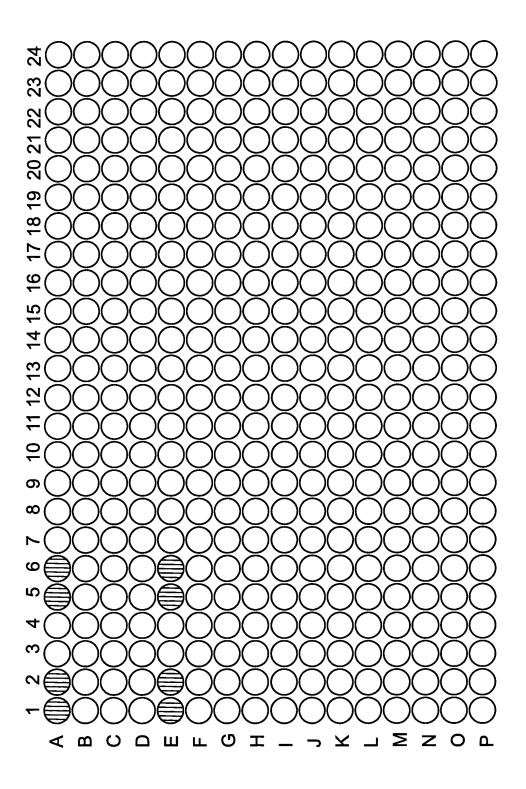


Fig. 12C

Sipper Opt	ions				X
General	Directories	Sample Wells	Advanced		
– Dwell Pa	attern ——				1
Name:	FewTrough.D	P4_384		New	
Row A: 1,2			Load		
				Save As	

Fig. 12D

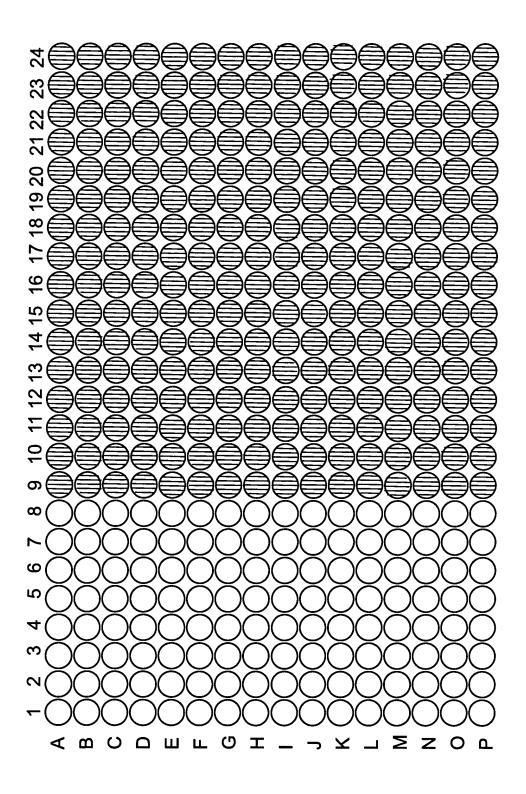


Fig. 12E

Sipper Options	<u>></u>
General Directories Sample Wells Advance	ed
Dwell Pattern	
Name: FullNoTrough.DP4_384	New
Row A: 9,10,11,12,17,18,19,20	Load
Row B: 9,10,11,12,17,18,19,20 Row C: 9,10,11,12,17,18,19,20	Save As
Row D: 9,10,11,12,17,18,19,20 Row I: 9,10,11,12,17,18,19,20	Save As
Row J: 9,10,11,12,17,18,19,20 Row K: 9,10,11,12,17,18,19,20	
Row L: 9,10,11,12,17,18,19,20]

Fig. 12F

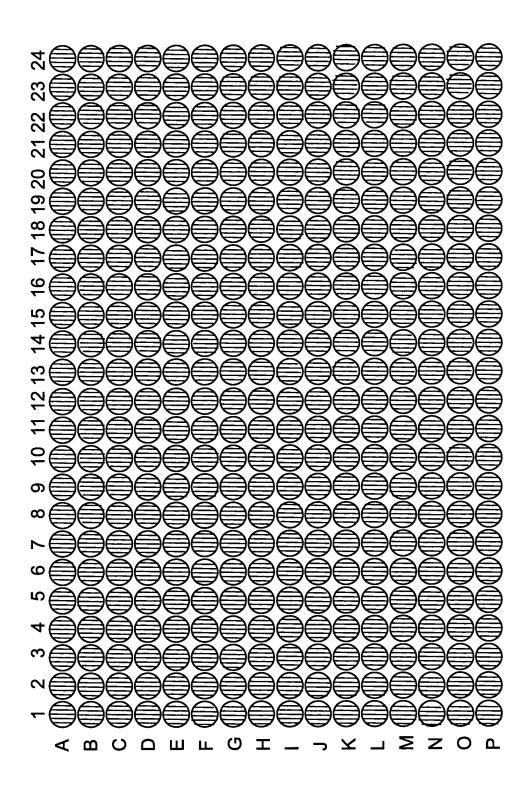


Fig. 12G

Sipper Opti	ons				X
General	Directories	Sample Wells	Advanced		
Dwell Pa	ttern ——				
Name:	FullTrough.D	P4_384		New	
Row B: Row C: Row D: Row I: Row J: Row K:	1,2,3,4,9,10 1,2,3,4,9,10 1,2,3,4,9,10 1,2,3,4,9,10 1,2,3,4,9,10),11,12,17,18,19),11,12,17,18,19),11,12,17,18,19),11,12,17,18,19),11,12,17,18,19),11,12,17,18,19),11,12,17,18,19	9,20 9,20 9,20 9,20 9,20 9,20	Load Save As	

Fig. 12H

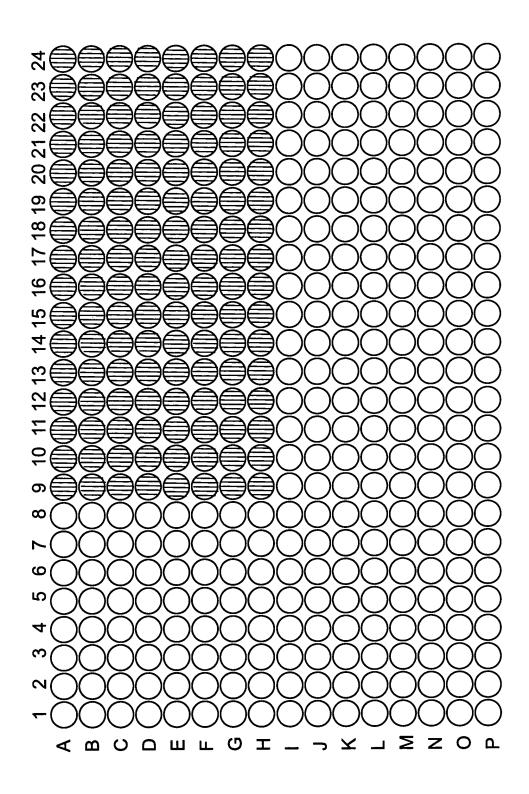


Fig. 12I

Sip	per Optio	ons				X
	General	Directories	Sample Wells	Advanced		
	Dwell Pattern					
	Name: HalfNoTrough.DP4_384				New	
	Row A: 9,10,11,12,17,18,19,20 Row B: 9,10,11,12,17,18,19,20				Load	
	Row C:	9,10,11,12,	17,18,19,20		Save As	
	Row D:	9,10,11,12,	17,18,19,20			

Fig. 12J

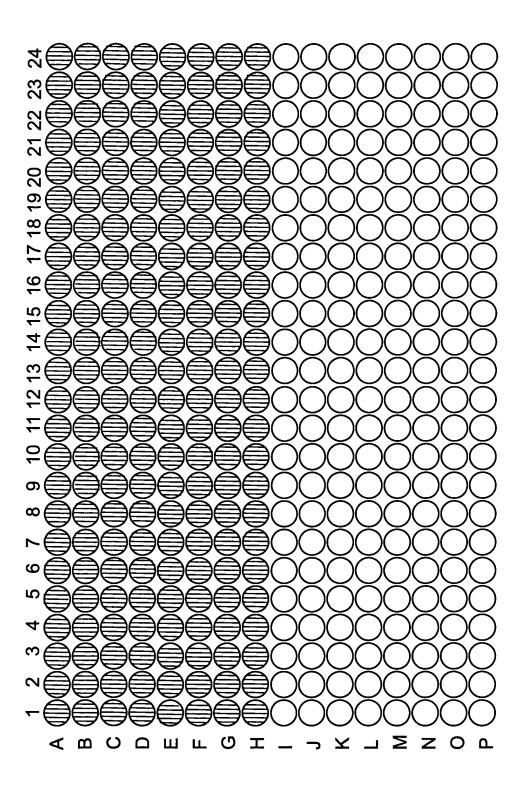


Fig. 12K

Sipper Opti	ons				X
General Dwell Pa Name: Row A: Row B: Row C:	Directories ttern HalfTrough.D 1,2,3,4,9,10 1,2,3,4,9,10 1,2,3,4,9,10	Sample Wells 0,11,12,17,18,19 0,11,12,17,18,19 0,11,12,17,18,19 0,11,12,17,18,19	9,20 9,20	New Load Save As	

Fig. 12L

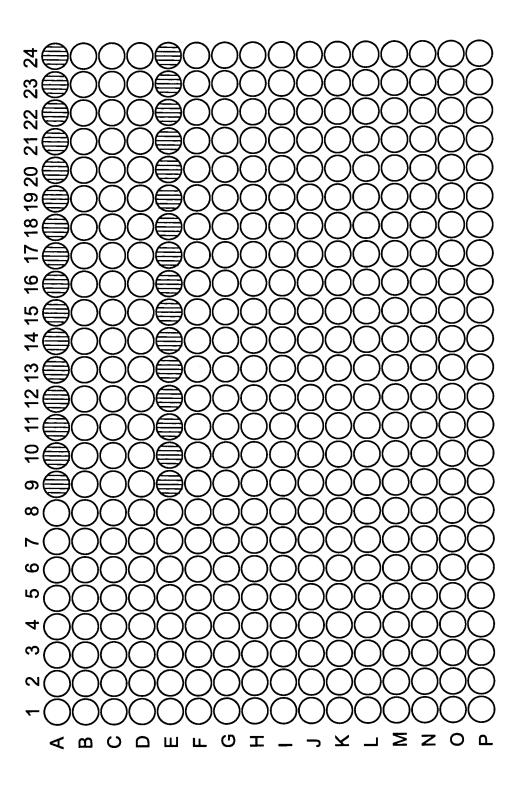


Fig. 12M

				ons	ipper Optic
		Advanced	Sample Wells	Directories	General
_				ttern ——	Dwell Pat
	New		ough.DP4_384	SeveralNoTro	Name: S
	Load		Row A: 9,10,11,12,17,18,19,20		
	Sava As		·		
	Save As				
	Load Save As		17,18,19,20	9,10,11,12,	Row A:

Fig. 12N

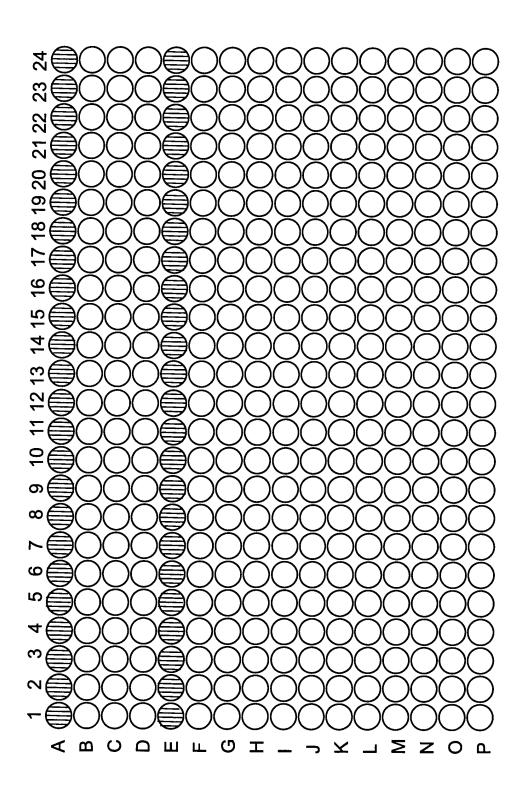


Fig. 120

Sipper Opt	ons			X
General	Directories	Sample Wells	Advanced	
Dwell Pa	attern —			
Name:	SeveralTroug	h.DP4_384		New
Row A:	Row A: 1,2,3,4,9,10,11,12,17,18,19,20			Load
				Save As
				Save As
			į	

Fig. 12P

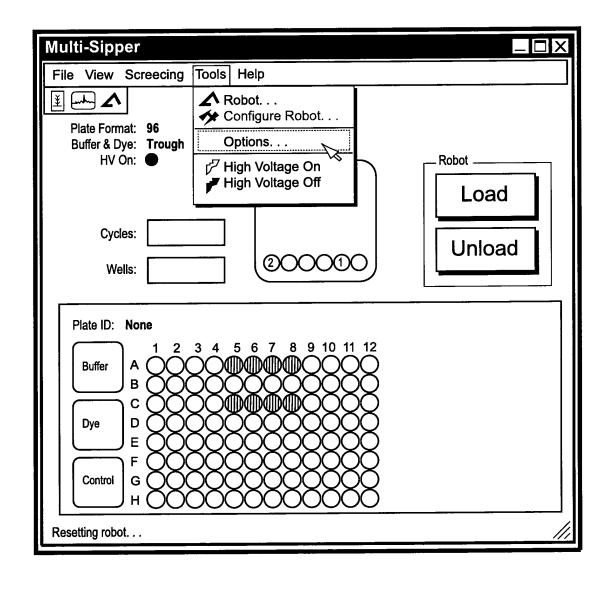


Fig. 13A

Sipper Option	ons		X			
Directories	Sample Wells Robot Settings					
☑ Pickup	☑ Pickup plate before starting robot motion					
Plate form	at: New384	Bro	owse			
Chip Form	at:					
		ОК	Cancel			

Fig. 13B

Sipper Options	X			
Directories Sample Wells Robot Settings	:			
☑ Use 1 rough for Butter and Dye Wells Dwell Pattern				
Name: FullTrough.DP4_384	New			
Row A: 1,2,3,4,9,10,11,12,17,18,19,20 Row B: 1,2,3,4,9,10,11,12,17,18,19,20	Load			
Row C: 1,2,3,4,9,10,11,12,17,18,19,20 Row D: 1,2,3,4,9,10,11,12,17,18,19,20	Save As			
Row I: 1,2,3,4,9,10,11,12,17,18,19,20 Row J: 1,2,3,4,9,10,11,12,17,18,19,20				
Row K: 1,2,3,4,9,10,11,12,17,18,19,20 Row L: 1,2,3,4,9,10,11,12,17,18,19,20				
☑ Control Wells On Plate				
Sipper 3: A1 Sipper 4: A3				
Sipper 2: C1 Sipper 1: C3				
0	K Cancel			

Fig. 13C

Load Dwell Pattern File	? X		
Save in: Protocols	*		
FewNoTrough.DP4_96 SeveralNoTrough.DP4_	_96		
FewTrough.DP4_96 SeveralTrough.DP4_96	;		
FullNoTrough.DP4_96			
FullTrough.DP4_96			
HalfNoTrough.DP4_96			
HalfTrough.DP4_96			
File name: HalfTrough	Save		
Save as type: Sipper Properties (*.DP4_96)	Cancel		
Open as read-only			

Fig. 13D

3	Sipper Options X
	Directories Sample Wells Robot Settings
	Dwell Pattern
	Name: HalfTrough.DP4_384 New
	Row A: 1,2,5,6,9,10 Row B: 1,2,5,6,9,10
	Save As
	Control Wells
	Control Wells On Plate
	Sipper 3: A1 Sipper 4: A1 Sipper 2: A1 Sipper 1: C1
	OK Cancel

Fig. 13E

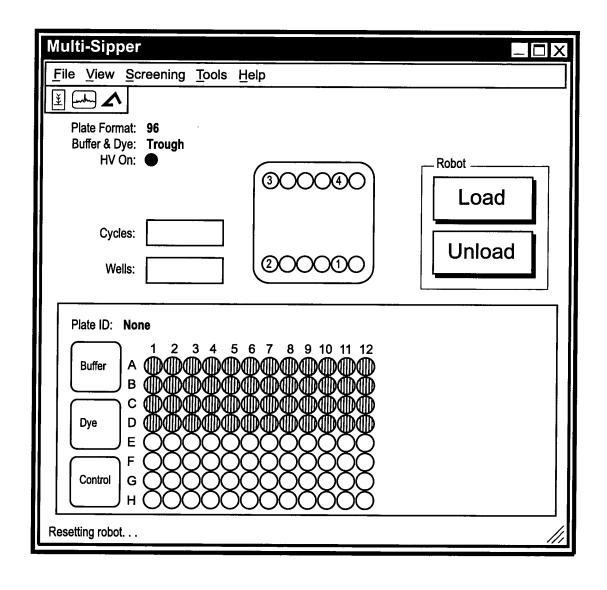


Fig. 13F

Multi-Sipper	_□×
File View Screening Tools Help	
Plate Form Buffer & D Start Stop Reset Reset	
HV Sipper Properties Robot Configuration	Load
Cycles: 200000	Unload
Plate ID: None 1 2 3 4 5 6 7 8 9 10 11 12	
Buffer A OOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOO	
Dye	
Control F	
Resetting robot	

Fig. 14A

Sipper Property - Default Sipper Properties	X
Inital Delay 0 secs	New
Buffer 1.4 secs	Load
Sample 0.4 secs	Save As
Dye Well —————————————————————————————————	
Injections pre/post 1 1	ОК
☐ Single dye injection between rows	Cancel
Pressure Driven Flow Pressure .2 PSI	
Base Pressure .2 PSI	
☐ ☑ Control Well On Trough ————	
Pre Control Buffer 0.6 secs	
Control 0.4 secs	
Post Control Buffer 2 secs	
Sample Well Cycles 1	
Final Delay 40 secs	

Fig. 14B

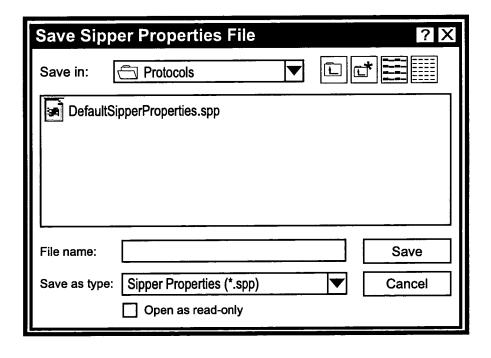


Fig. 14C